### § 193.2605

- (b) An operator may not place, return, or continue in service any component which is not maintained in accordance with this subpart.
- (c) Each component taken out of service must be identified in the records kept under §193.2639.
- (d) If a safety device is taken out of service for maintenance, the component being served by the device must be taken out of service unless the same safety function is provided by an alternate means.
- (e) If the inadvertent operation of a component taken out of service could cause a hazardous condition, that component must have a tag attached to the controls bearing the words "do not operate" or words of comparable meaning.

### § 193.2605 Maintenance procedures.

- (a) Each operator shall determine and perform, consistent with generally accepted engineering practice, the periodic inspections or tests needed to meet the applicable requirements of this subpart and to verify that components meet the maintenance standards prescribed by this subpart.
- (b) Each operator shall follow one or more manuals of written procedures for the maintenance of each component, including any required corrosion control. The procedures must include:
- (1) The details of the inspections or tests determined under paragraph (a) of this section and their frequency of performance; and
- (2) A description of other actions necessary to maintain the LNG plant according to the requirements of this subpart.
- (c) Each operator shall include in the manual required by paragraph (b) of this section instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of § 191.23 of this subchapter.

[Amdt. 193–2, 45 FR 70407, Oct. 23, 1980, as amended by Amdt. 193–5, 53 FR 24950, July 1, 1988; 53 FR 26560, July 13, 1988; Amdt. 193–18, 69 FR 11337, Mar. 10, 2004]

### §193.2607 Foreign material.

- (a) The presence of foreign material, contaminants, or ice shall be avoided or controlled to maintain the operational safety of each component.
- (b) LNG plant grounds must be free from rubbish, debris, and other material which present a fire hazard. Grass areas on the LNG plant grounds must be maintained in a manner that does not present a fire hazard.

## §193.2609 Support systems.

Each support system or foundation of each component must be inspected for any detrimental change that could impair support.

## § 193.2611 Fire protection.

- (a) Maintenance activities on fire control equipment must be scheduled so that a minimum of equipment is taken out of service at any one time and is returned to service in a reasonable period of time.
- (b) Access routes for movement of fire control equipment within each LNG plant must be maintained to reasonably provide for use in all weather conditions.

### § 193.2613 Auxiliary power sources.

Each auxiliary power source must be tested monthly to check its operational capability and tested annually for capacity. The capacity test must take into account the power needed to start up and simultaneously operate equipment that would have to be served by that power source in an emergency.

# § 193.2615 Isolating and purging.

- (a) Before personnel begin maintenance activities on components handling flammable fluids which are isolated for maintenance, the component must be purged in accordance with a procedure which meets the requirements of AGA "Purging Principles and Practices," unless the maintenance procedures under §193.2605 provide that the activity can be safely performed without purging.
- (b) If the component or maintenance activity provides an ignition source, a technique in addition to isolation valves (such as removing spool pieces